

FIG. 1

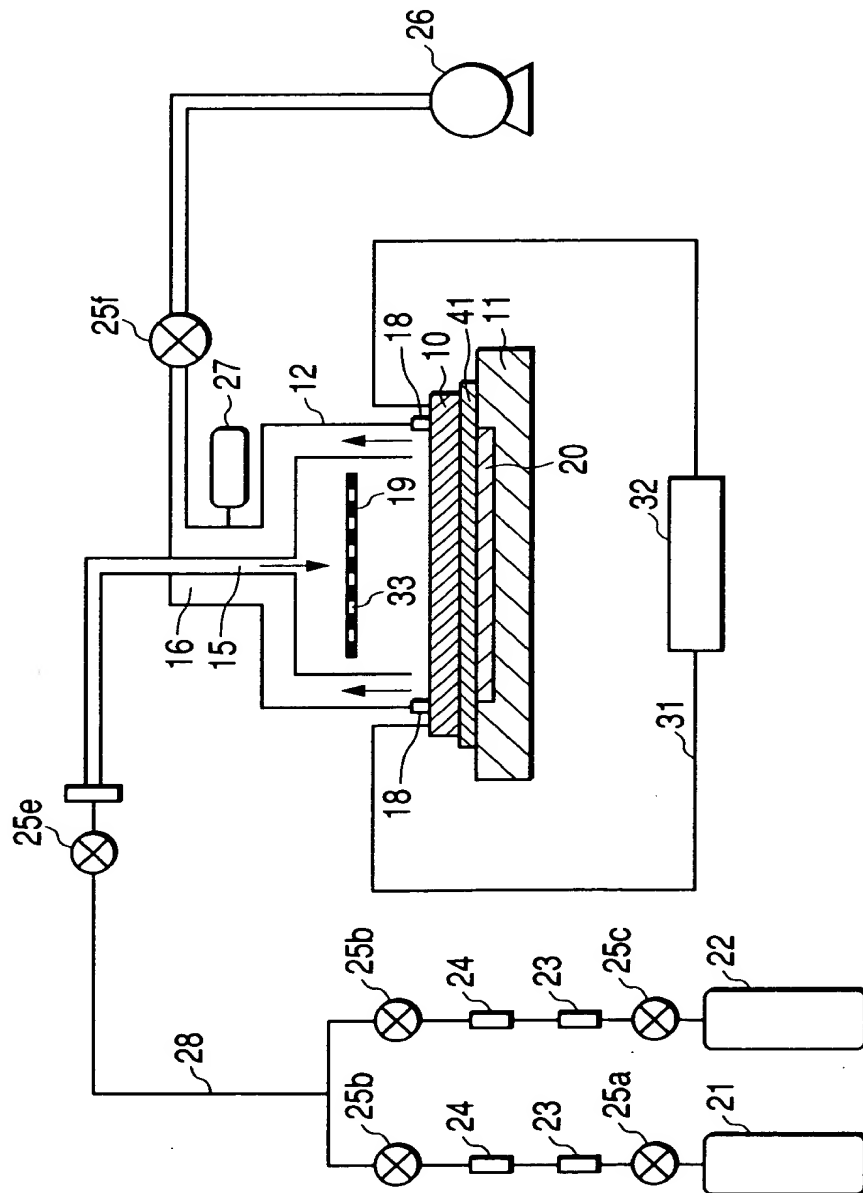


FIG. 2

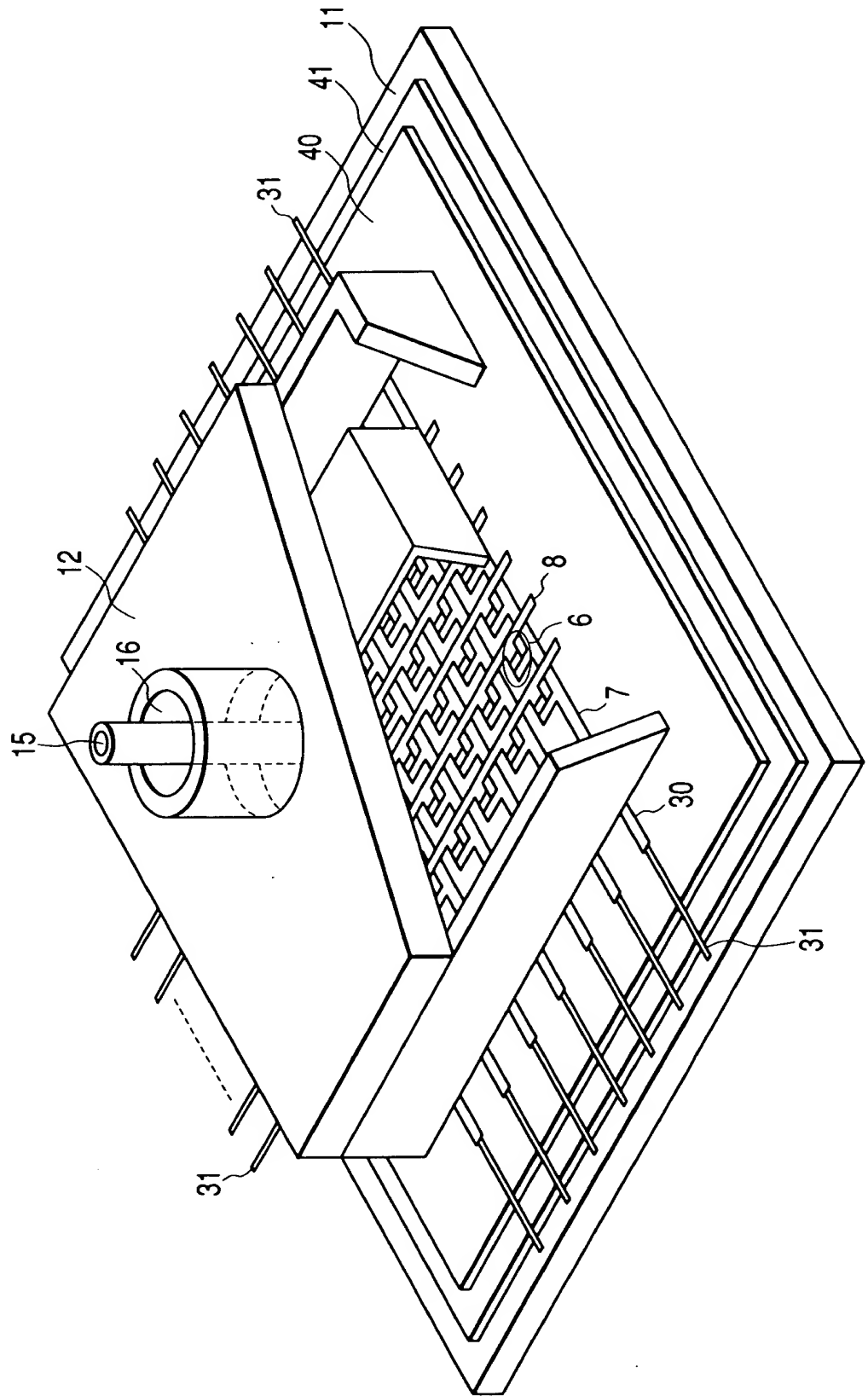


FIG. 3

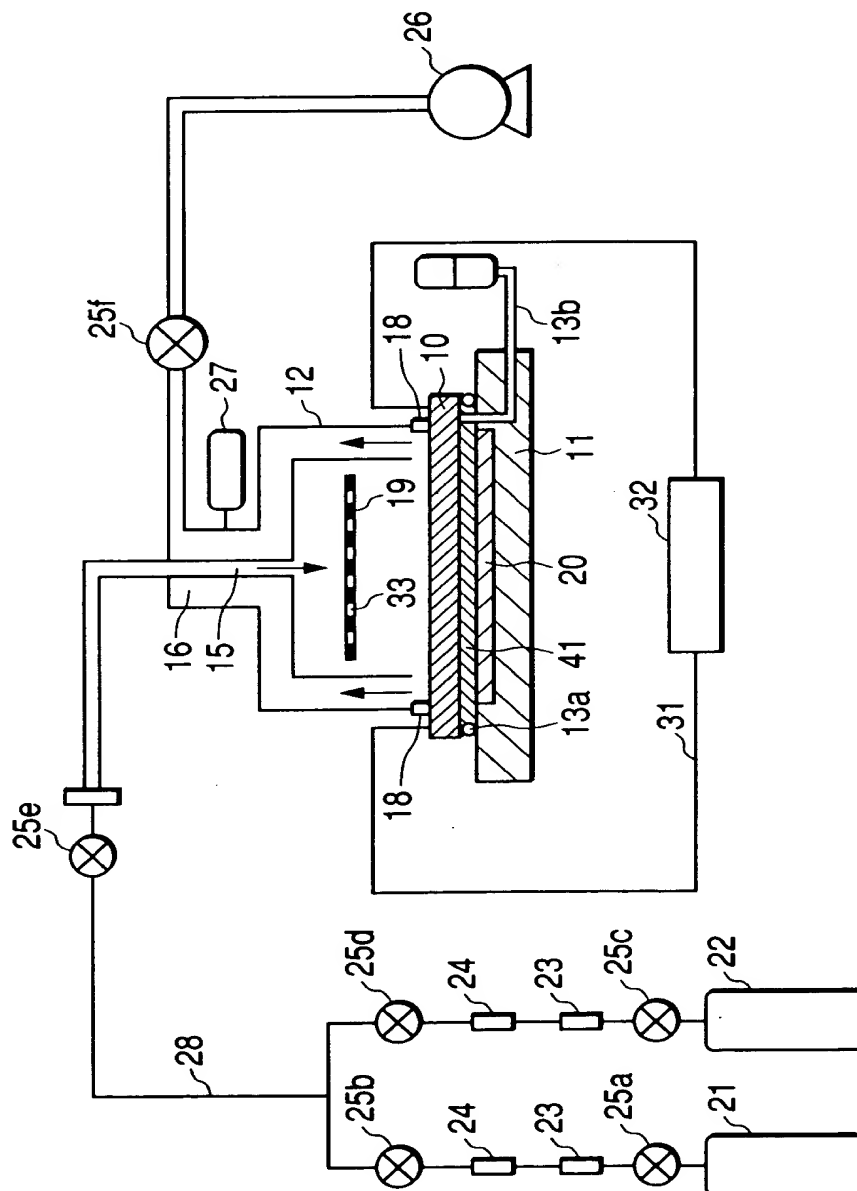
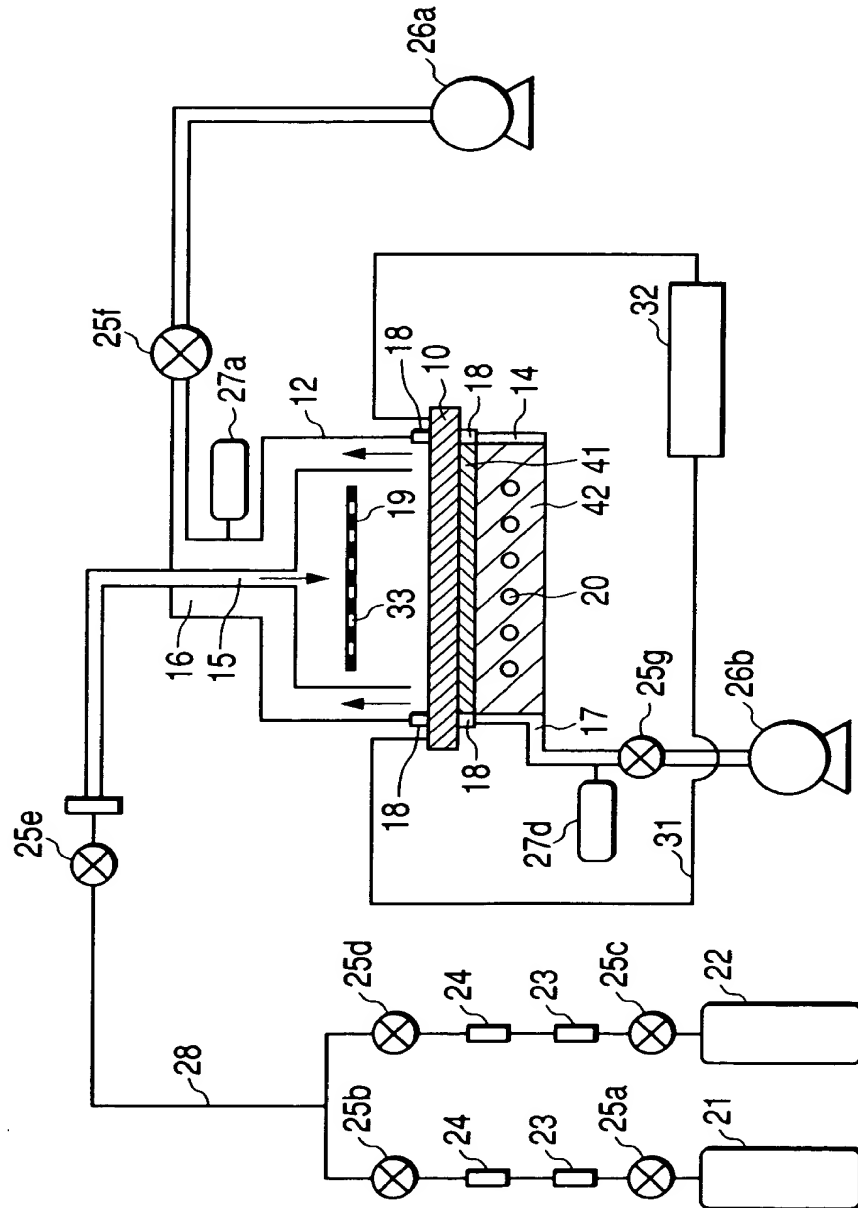


FIG. 4



The diagram illustrates a vacuum furnace system. It features two heating elements, 21 and 22, each connected to a power source (25a, 25b and 25c, 25d) through a series of components including resistors (23, 24) and switches (25e, 25f). The heating elements are connected to a central chamber (10) via a duct (12). The chamber contains a sample (19) and is surrounded by a cooling jacket (14) with a cooling medium (18). A vacuum pump (26b) is connected to the chamber through a valve (25g) and a duct (26a). The system is controlled by a central unit (32) which monitors the temperature (31) and pressure (33) within the chamber.

FIG. 6

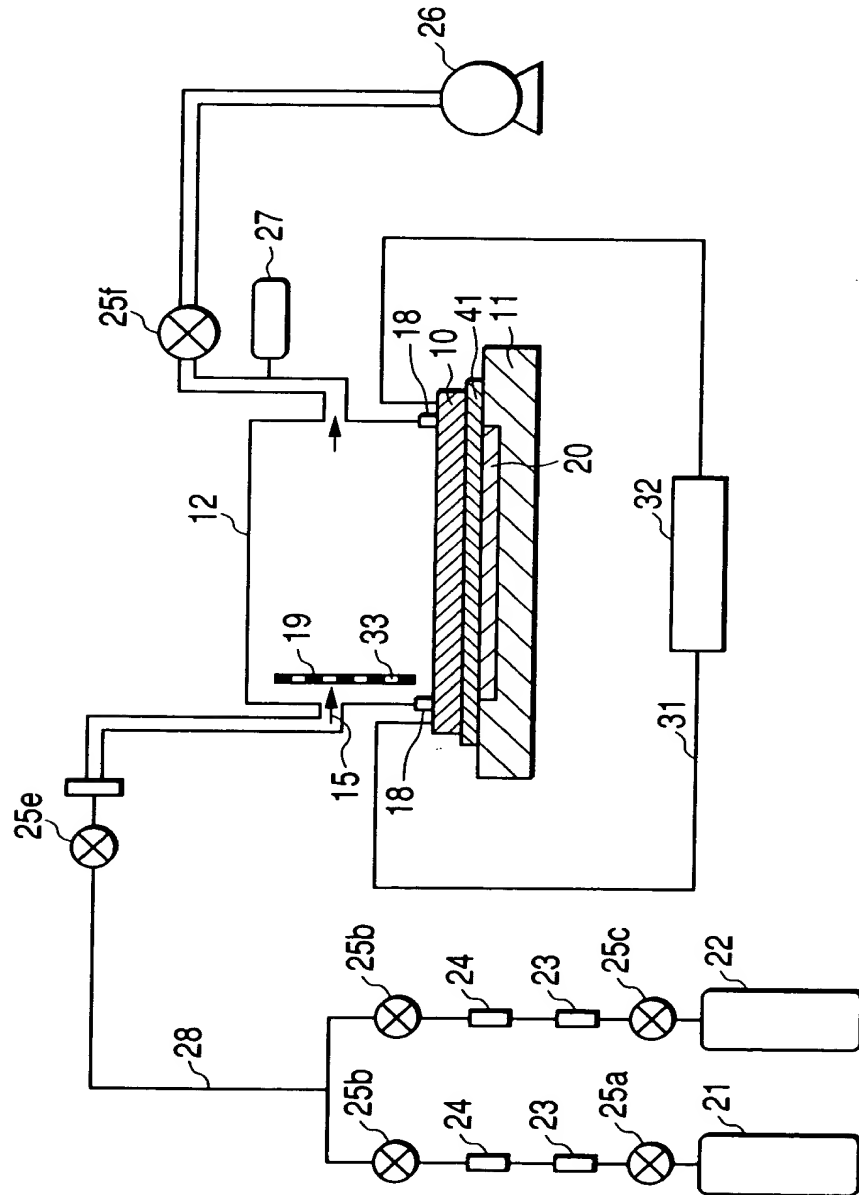


FIG. 7

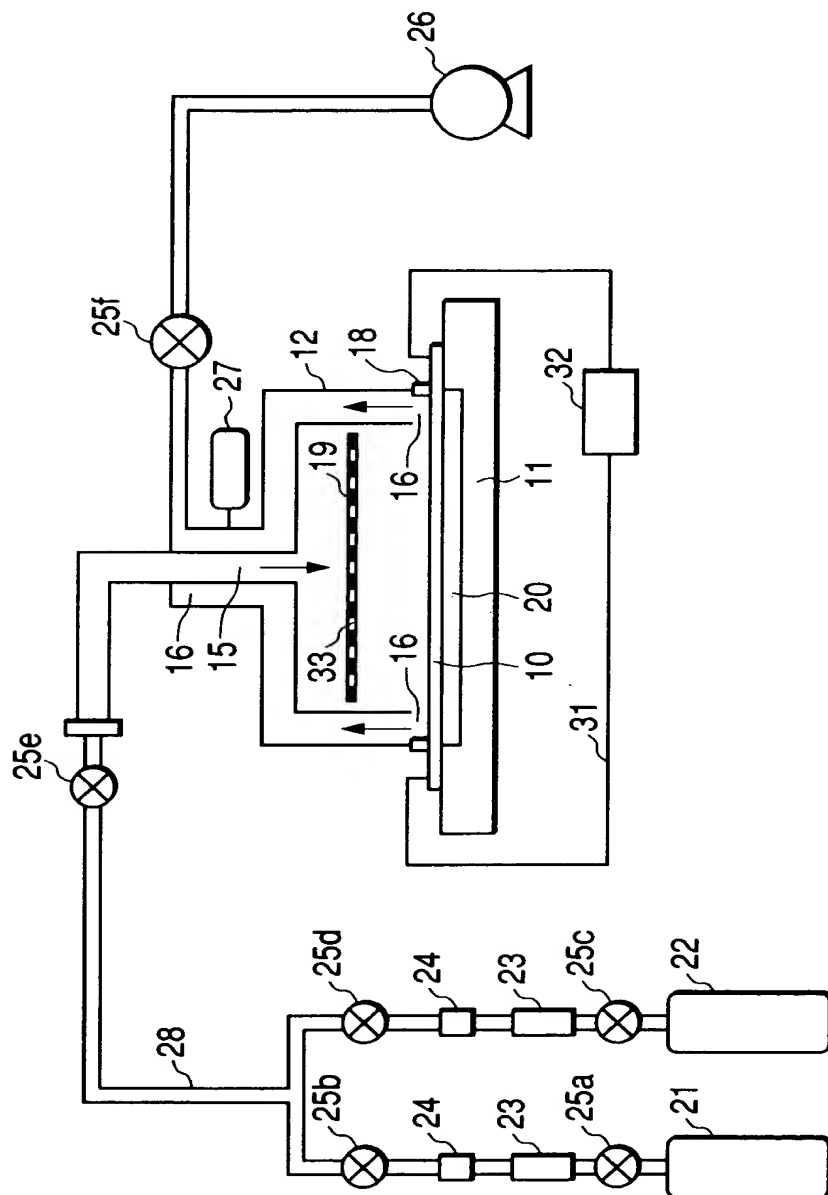


FIG. 8

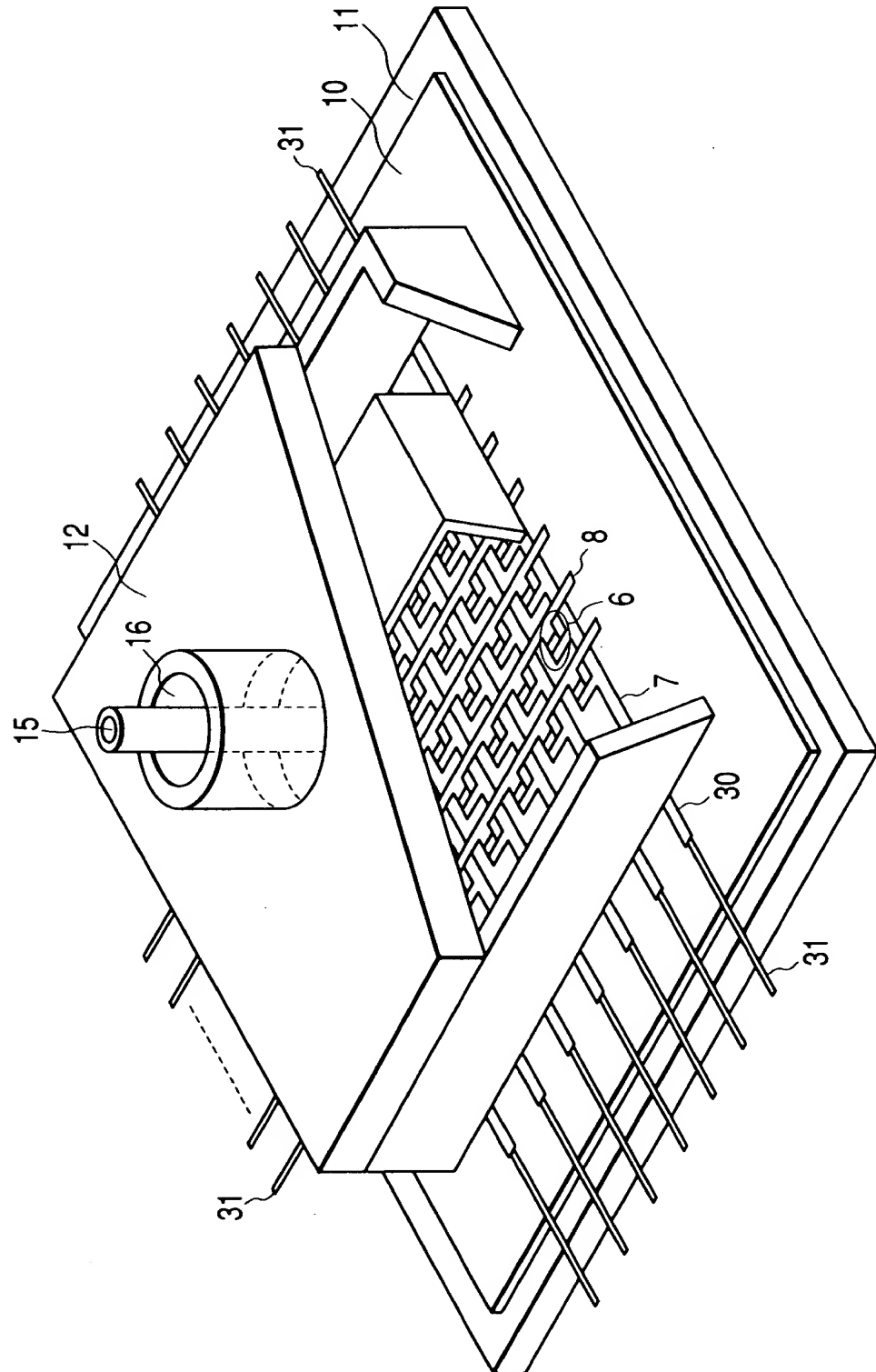


FIG. 9

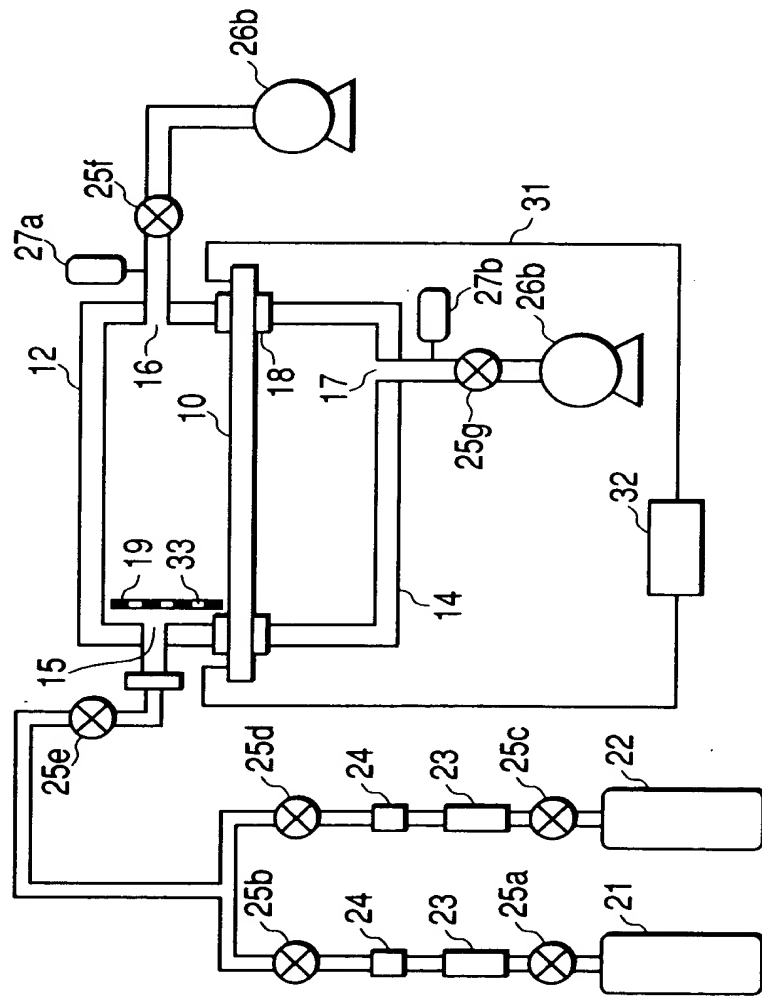


FIG. 10A

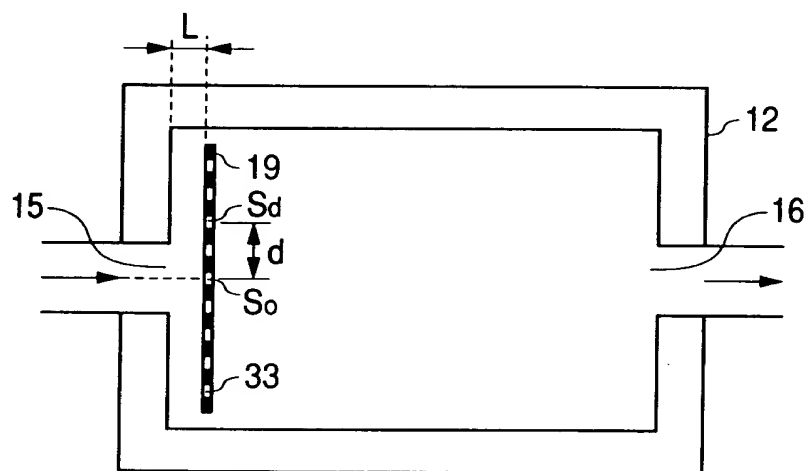


FIG. 10B

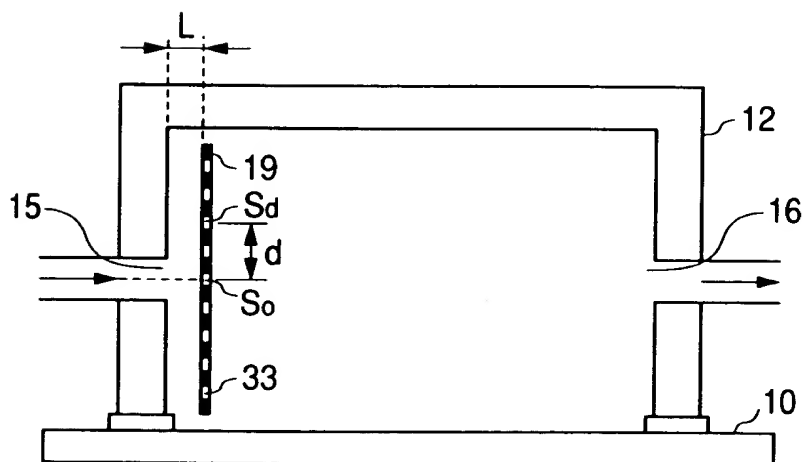


FIG. 11

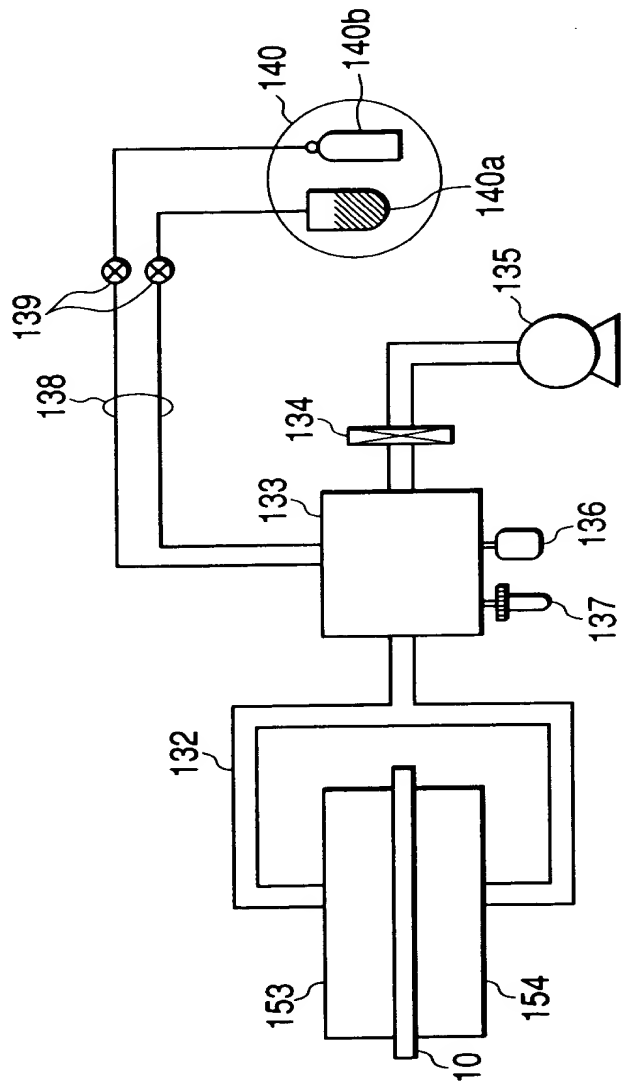


FIG. 12

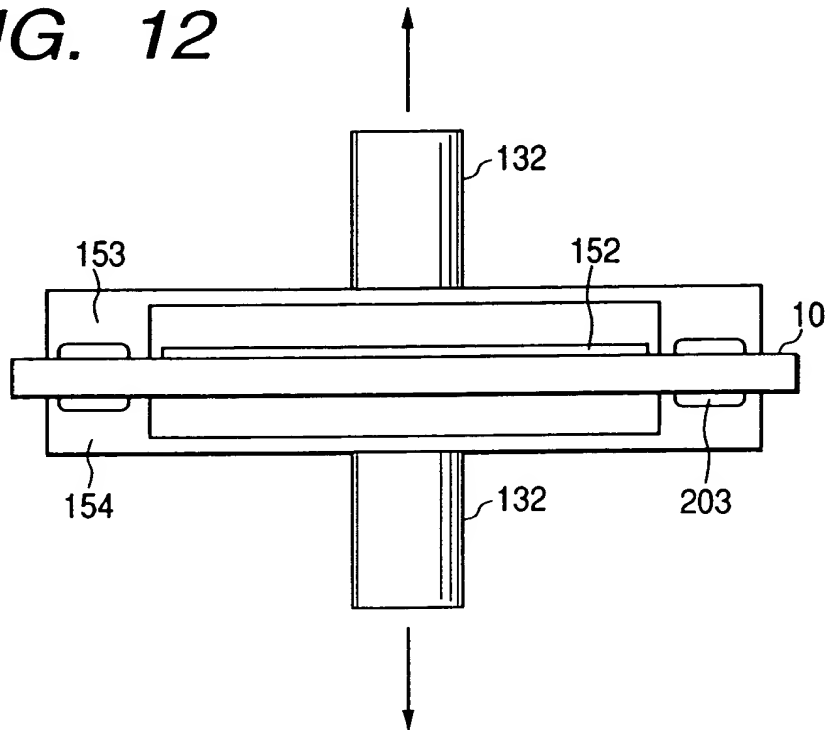


FIG. 13

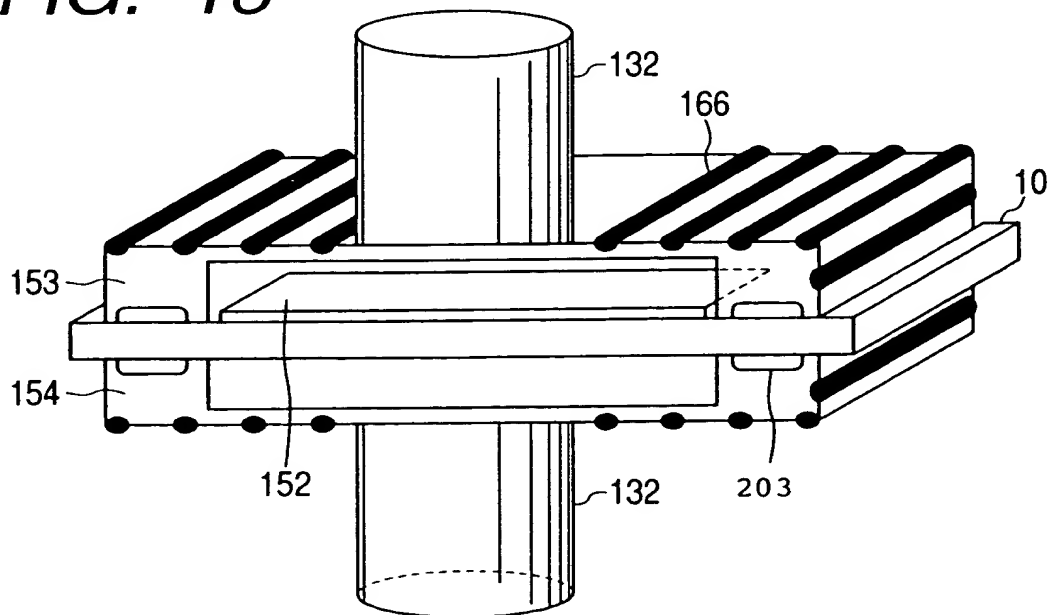


FIG. 14

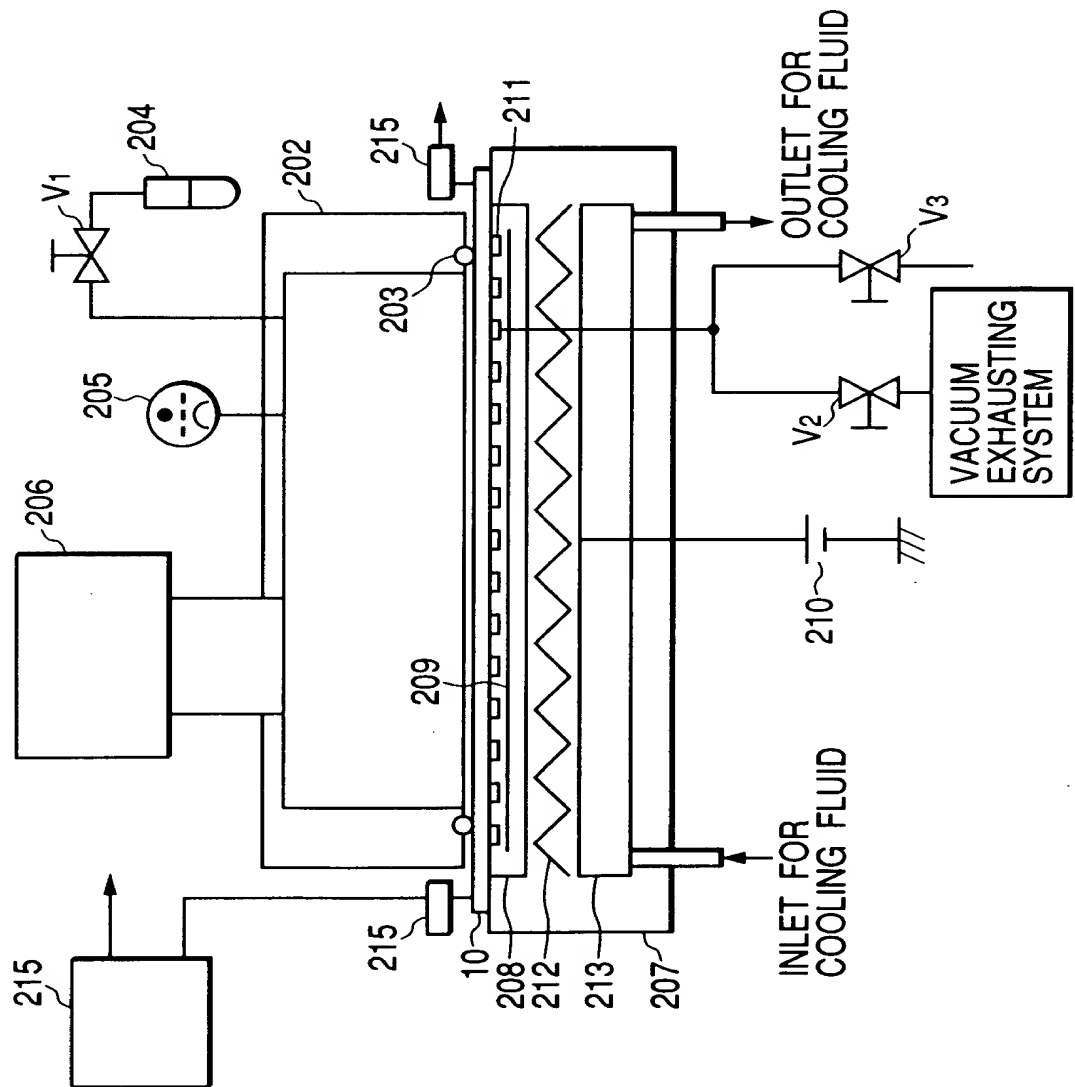


FIG. 15

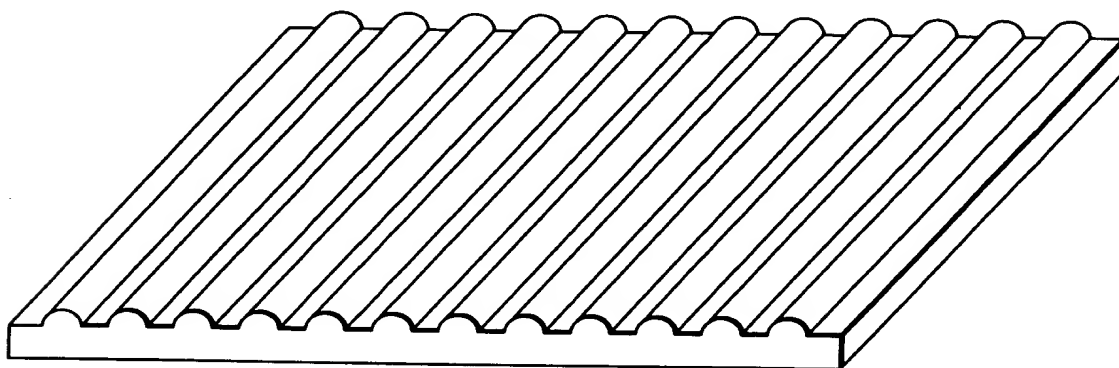


FIG. 16

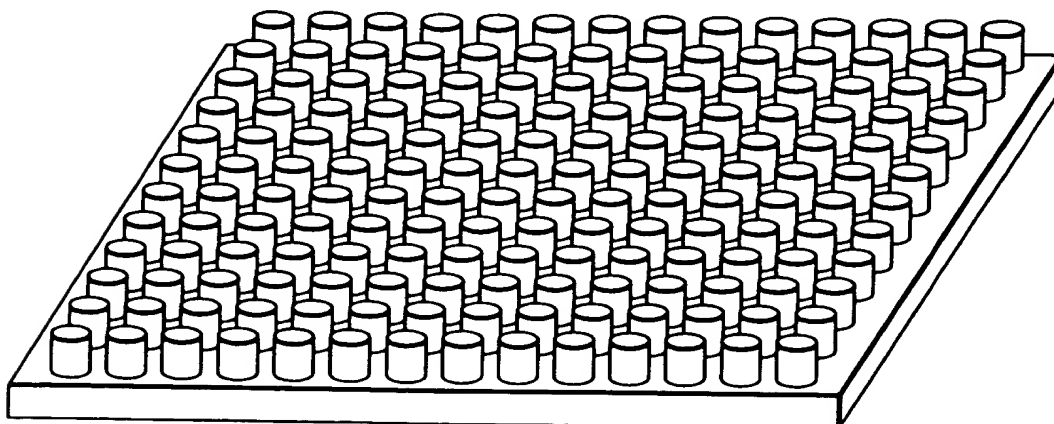


FIG. 17

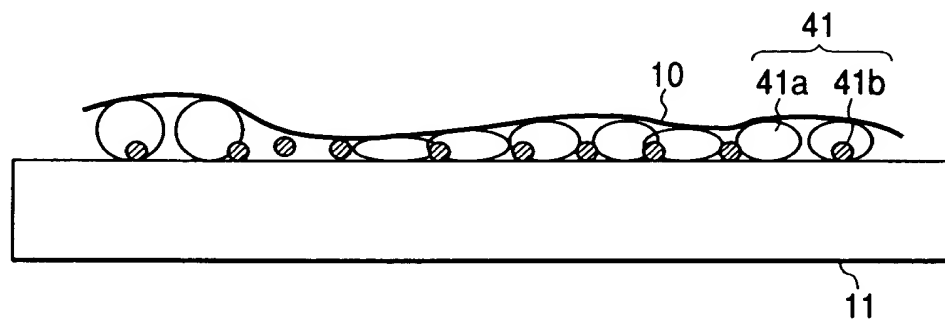


FIG. 18

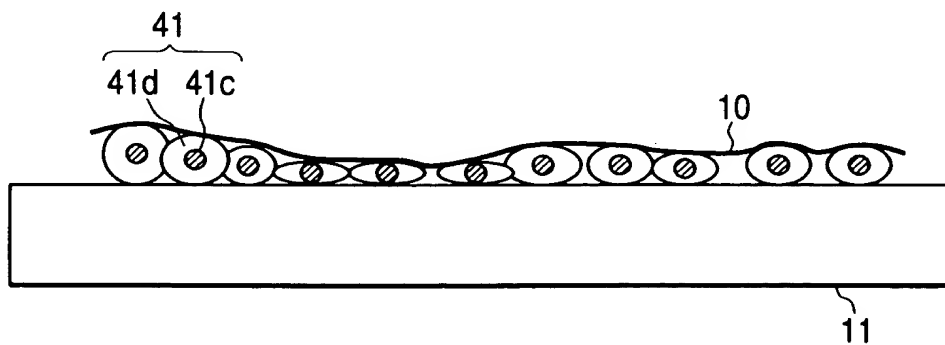


FIG. 19

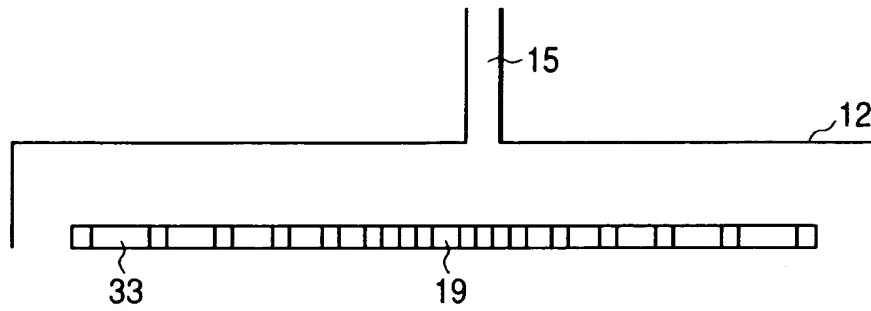
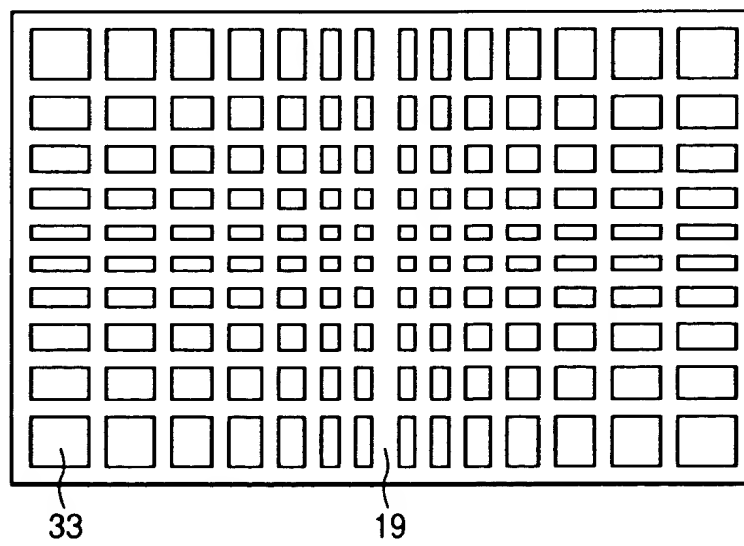


FIG. 20



The graph shows a step-wise increase in pressure over time. The pressure starts at 10^{-5} Pa , increases to 10^{-4} Pa , then to 10^{-5} Pa , and finally to 10^{-6} Pa .

FIG. 22

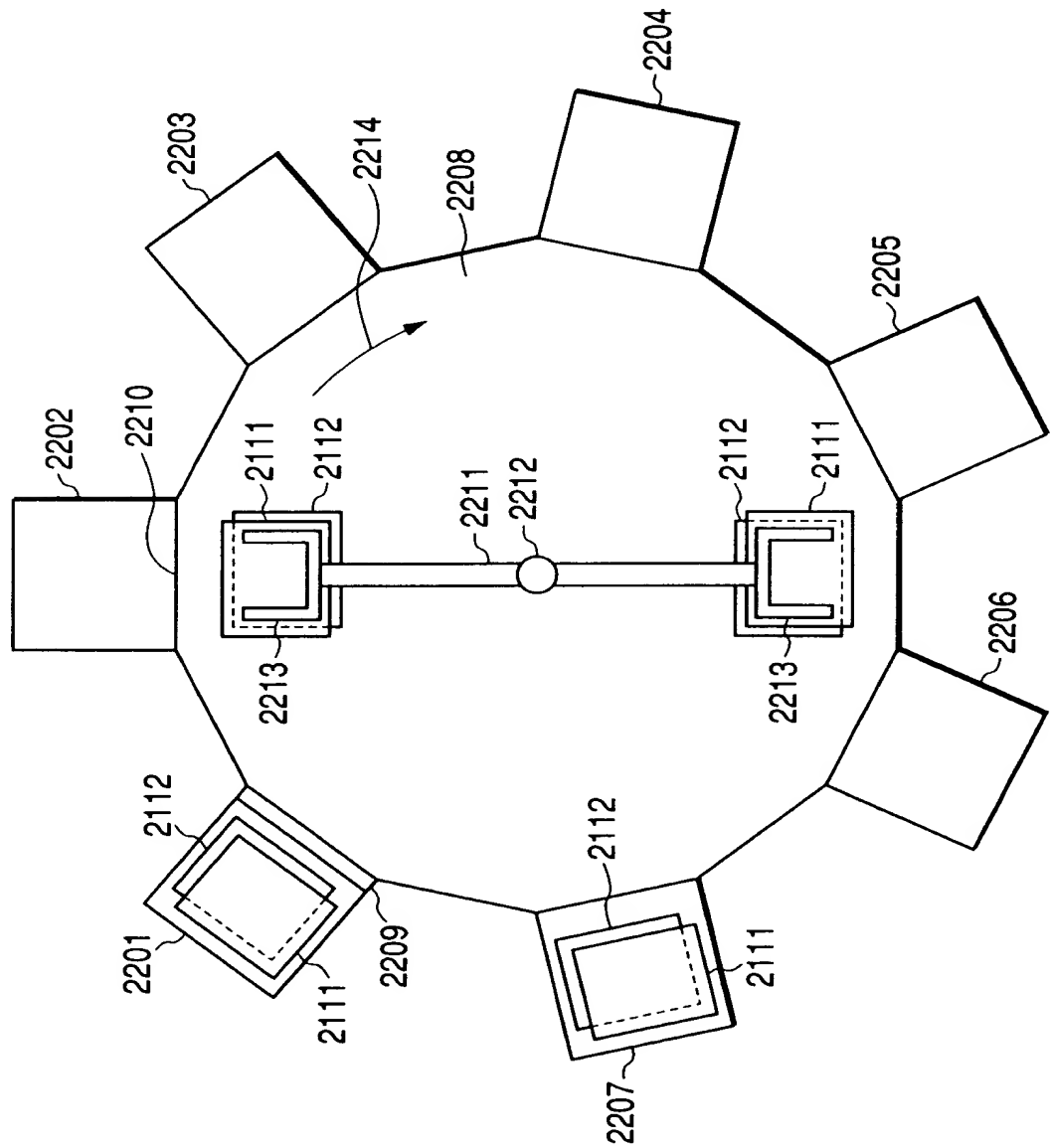


FIG. 23

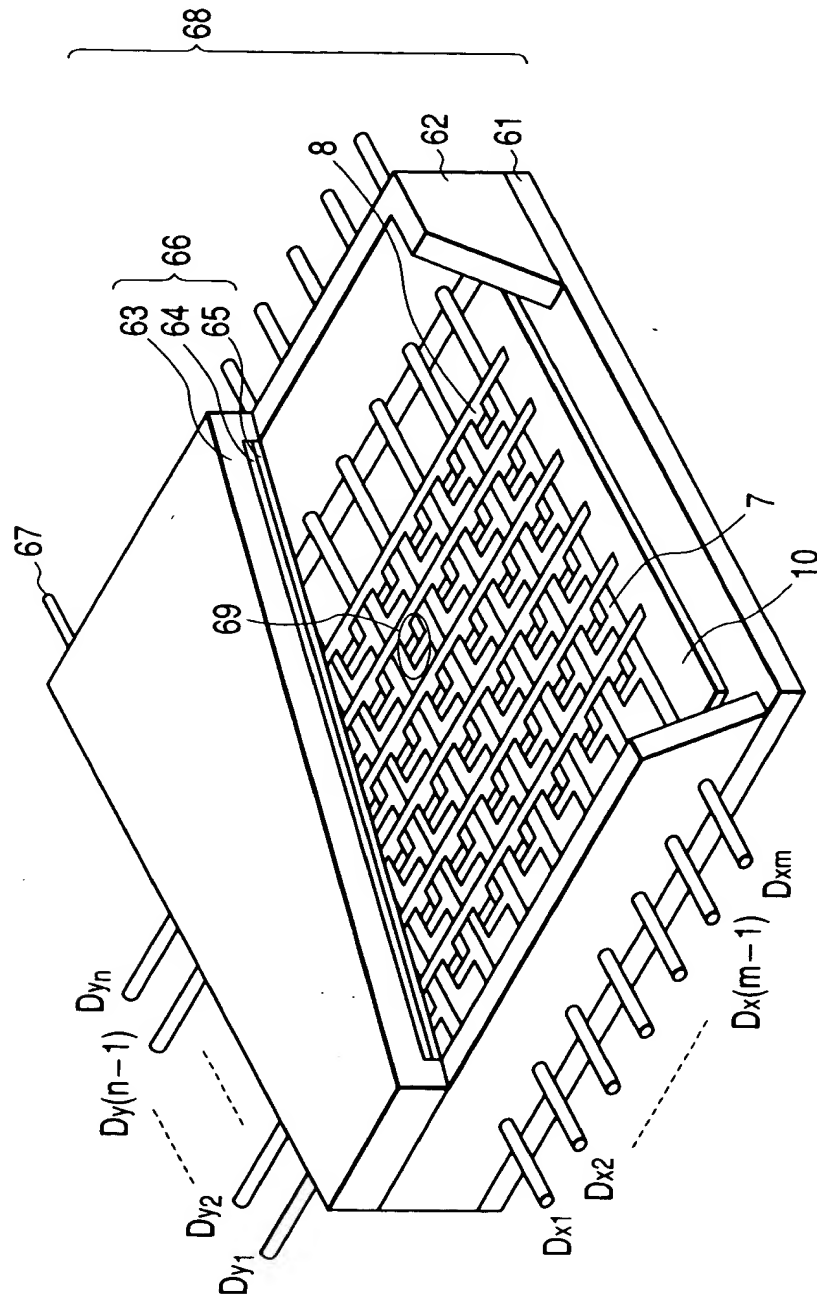


FIG. 24

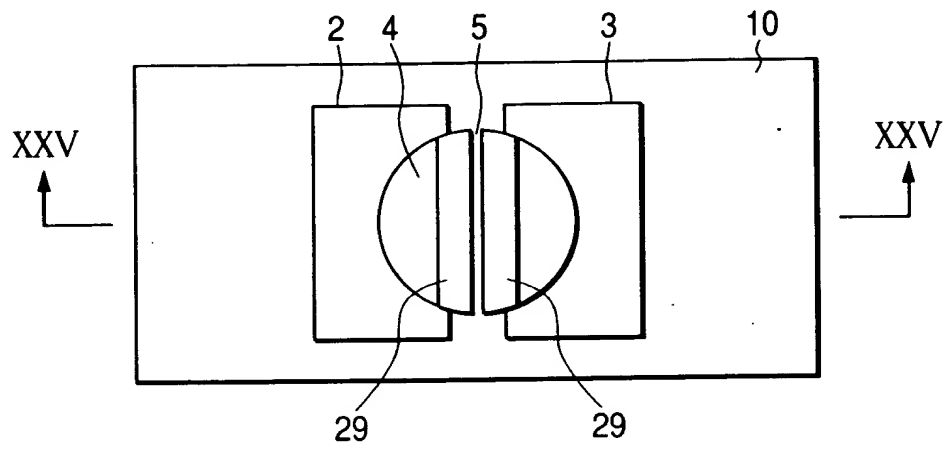


FIG. 25

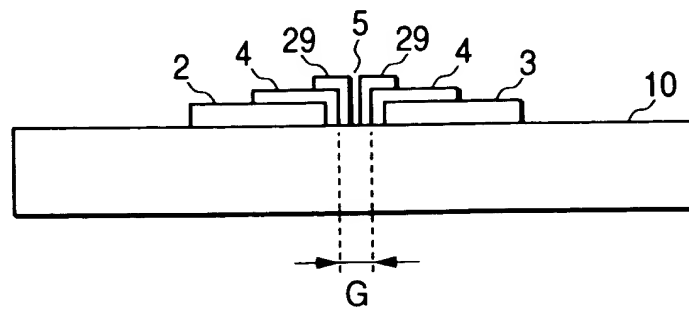


FIG. 26

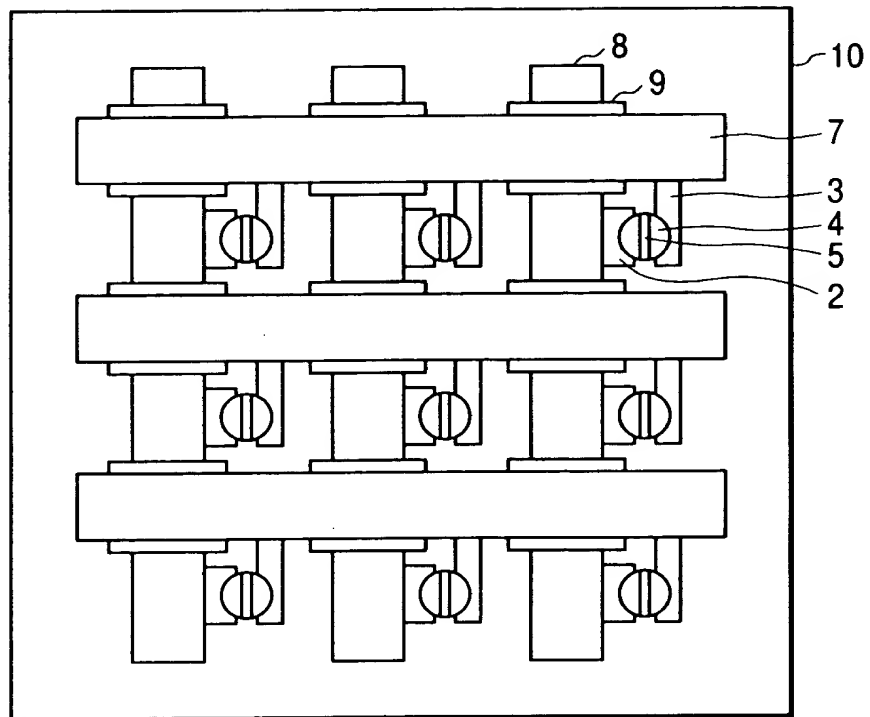


FIG. 27

